Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for HLA typing of HLA-A to generate subgroups A to O, by the unambiguous determination of short DNA sequence elements (2-6 bases) ~~at a given position~~ simultaneously on both parental alleles at a set of multiple selected ~~number of~~ positions in HLA-A ~~genes~~ gene, wherein the set of positions consists of positions 98, 414, 539, 282, 571, 368, 256, 292, 238 and 270 (according to the numbering of the HLA-A gene starting at cDNA sequence position 1 of exon 1 as depicted in Figure 1) comprising the steps for each position of:

a) hybridizing a combination of oligonucleotides (primers) complementary to all known sequence variants to a DNA strand upstream of a given position;

b) carrying out a primer extension reaction with at least one of the four dNTP substrates substituted by a terminating analog;

c) analyzing the products by mass spectrometry ~~, with the resulting~~ which results in masses allowing unambiguous identification of the used primers and the added bases.

2. (Currently amended) The method of claim 1, wherein ~~where~~ the DNA strand of step a) is produced by a DNA replication procedure such as PCR or rolling circle replication.

3. (Currently amended) The method of claim 1, wherein ~~where~~ the combination of primers has slightly varying sequences so that all sequences of the haplotypes are represented by a perfectly matching primer.

4. (Currently amended) The method of claim 3, wherein ~~where~~ mass shifting tags are added to the individual primers sequences to m ake them uniquely distinguishable once the terminating base is added.

5. (Currently amended) The method of claim 1, wherein ~~where~~ distinguishable termination products for known alleles are generated by extending the perfectly hybridised

primer with a combination of dNTPs and ddNTPs or analogs thereof with a DNA polymerase to generate specific termination products.

6. (Currently amended) The method of claim 1, wherein ~~where~~ the GOOD assay is used.

7. (Currently amended) The method of claim 1, wherein ~~where~~ mass spectrometry selected from MALDI or ESI mass spectrometry is used for analysis of the masses of products.

8. (Canceled)

9. (Currently amended) The method for HLA typing of HLA-A of claim 1, wherein ~~where~~ assays of the positions ~~98, 414, 539, 282, 571, 368, 256, 292, 238, 270,~~ 453, 527, 502, 81, 268, 559, 92, 123 and 396 (according to the numbering of the HLA-A gene starting at cDNA sequence position 1 of exon 1 as depicted in Figure 1) are further analyzed [[used]] to achieve medium resolution.

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Currently amended) The method for HLA typing ~~of claim 12~~ HLA-A of claim 1, wherein ~~where assays of the~~ positions 224, 268, 376, 502, 561 and 616 are ~~preferably~~ further analysed to resolve subgroup HLA-A_A; positions 126 and 526 to resolve subgroup HLA-A_B; positions 81, 90, 92, 212, 214, 257, 265, 299, 302, 404, 420, 427, 453, 485, 489 and 502 to resolve subgroup HLA-A_C; positions 160, 200, 362 and 524 to resolve subgroup HLA-A_D; positions 180, 299, 301, 302, 346, 418, 453, 517, 524, 526, 527, 557, 559 and 560 to resolve subgroup HLA-A_E; positions 299, 301, 302, 341 and 583 to resolve subgroup HLA-A_F; positions 127, 341, 399, 480, 502, 503, 524, 526, 527, 553, 559, 560 and 565 to resolve subgroup HLA-A_G; positions 228, 233, 463, 519, 530 and 583 to resolve subgroup HLA-A_H; positions 102, 275, 317, 362, 418, 419, 497, 524, 555, 595 and 618 to resolve

subgroup HLA-A_I; positions 92, 331, 453, 524, 559, 560 and 564 to resolve subgroup HLA-A_J; positions 78, 81, 123, 125, 142, 144, 194, 268, 294, 324, 355, 362, 396, 403, 419, 453, 456, 477, 493, 517, 524, 526, 527, 559 and 560 to resolve subgroup HLA-A_K; positions 113, 299, 301, 302, 308, 311, 523, 524 to resolve subgroup HLA-A_L; positions 171, 363, 498 and 559 to resolve subgroup HLA-A_M; positions 376, 426, 527, 555, 557 and 595 to resolve subgroup HLA-A_N; position 299 to resolve subgroup HLA-A_O are used.

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Currently Amended) Kit for the implementation of the ~~procedure~~ method of claim 1 ~~comprising~~ consisting of the pool ~~pools~~ of primers of Table IV.

19. (Currently amended) The method of HLA typing of HLA-A of claim 1 wherein the determination is for screening of tissue donors.

20. (Previously Presented) The method of claim 19 wherein said donors are bone marrow donors in registries and said screening is screening for frequent and rare HLA types in said registries.

21. (Currently amended) The method of claim 1, wherein the primers are primers represented in ~~Table IV, V and VI~~ Table IV.